

# ABSTRACT

A single-crystal transparent ferromagnetic compound that transmits light and has significant ferromagnetic properties is selected from the group consisting of alkaline earth chalcogenides, alkali chalcogenides, I-VII compounds, II-VI compounds, III-V compounds, IV-VI<sub>2</sub> compounds, IV-IV compounds, and II-VII<sub>2</sub> compounds. At least one element having an incomplete outermost p-electron shell, such as B, C, N, O, F, Si, or Ge, is dissolved in the compound so that the compound has a ferromagnetic transition temperature of room temperature or higher. The ferromagnetic properties of the compound are controlled by adjustment of the concentration of the element having an incomplete outermost p-electron shell and valence electron control through, for example, the addition of an acceptor and a donor.